

Work Order ID 144159

Tuesday, April 05, 2016 1:02:35 PM

144159

Page 1

Item ID: D3533-1

Revision ID:

Item Name: Set Screw

Start Date: 4/8/2016 Start Qty: 25.00

Required Date: 4/12/2016 Req'd Qty: 25.00

Reference:

Accept

N900040100

Setup Start ***NS1***

Stop ***NS2***

Cust Item ID:

Customer:

APR 07 2016
DAS
13
9-89

50
25
25

Approvals: Process Plan: MLJ Date: APR 05 2016 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3533	Rev B

100

0.00

100

Purchasing

Purchasing

PURCHASING

Memo

Issue P/O: 31970 Purchase Part Number: 92311A564 Supplier: MAC
MASTER CARR Certificate of conformity is required

0.00

50

APR 07 2016

DAS
13
9-89

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Packaging

Memo

Ensure material certification is attached

0.01

50x 80/6-af-11

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Quality Control

Memo

0.00

50

DAS
38
9-89

APR 12 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐					
OTHER : ☐									

Work Order ID 144159

Tuesday, April 05, 2016 1:02:35 PM

144159

Page 2

Item ID: D3533-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Set Screw

Stop

NS2

Start Date: 4/8/2016 Start Qty: 25.00

25

Cust Item ID:

Required Date: 4/12/2016 Req'd Qty: 25.00

25

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

130

Identify as per dwg & Stock Location: 81041/

0.00

130

Packaging

Memo

0.00

Packaging

50x Sp16-04-12

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

0.04

Quality Control

ML5 APR 12 2016ML5 APR 12 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
					QC / QA Coordinator Approval				

Root Cause				FAULT CATEGORY			
Environment ☐	Design ☐	Doc/Data ☐	Equip/Tooling ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Handling/Pre ☐	Material ☐	Internal Transport ☐	Tribal Knowledge ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
LOA ☐	Substation ☐	Past Expiry Date ☐	Misidentified ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
				Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
				Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
				Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
				Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
				Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
				Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
				Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
				OTHER : ☐			

Picklist Print

Tuesday, April 05, 2016 1:02:41 PM

Page 1

Work Order ID: 144159

144159

Parent Item: D3533-1

D3533-1

Parent Item Name: Set Screw

Start Date: 4/8/2016

Required Date: 4/12/2016

Start Qty: 25.00

Required Qty: 25.00

Comments: IPP Rev:A New Issue 06-07-25 JLM verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
92311A564		Purchased	No			110	Each	0.0000	1				
92311A564									**				
Set Screw													

25 50x
50x SP/16-04/11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

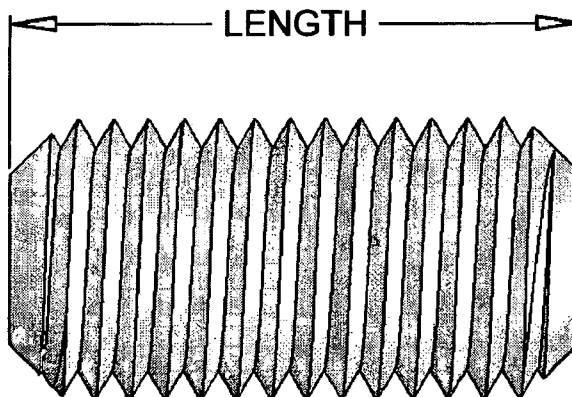
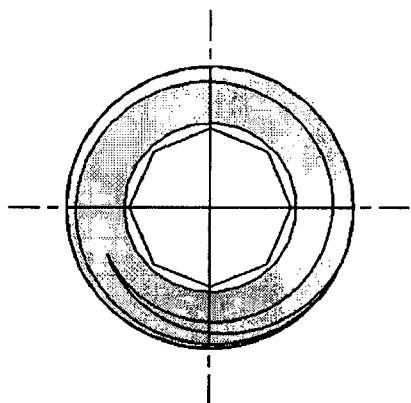
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER : ☐			



DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D3533	REV. B SHEET 1 OF 1
DATE 07.06.14		TITLE SET SCREW	SCALE NTS
REV	DATE	DESCRIPTION	
A	06.07.12	NEW ISSUE	
B	07.06.14	ADD D3533-3; ADD MATERIAL/FINISH COLUMN	

SPECIFICATION CONTROL DRAWING

RELEASED
07.08.03 [Signature]



B

PART NUMBER	MATERIAL AND FINISH	SIZE	LENGTH	POSSIBLE SUPPLIER
D3533-1	18-8 STAINLESS STEEL	1/4-28 UNF	1.000	McMASTER-CARR, P/N 92311A564
D3533-3	BLACK OXIDE ALLOY STEEL	#6-40 UNF	0.188	McMASTER-CARR, P/N 91375A161

B

NOTES:

- 1) TYPE: CUP POINT HEX HEAD SET SCREWS
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

160405
154159
mcs
UNCONTROLLED COPY
ENGINEERING
RETURN TO
WORK ORDER
WITHOUT NOTICE
SUBJECT TO ASSIGNMENT

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DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause				FAULT CATEGORY							
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐		No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐		Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐		Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐		Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : ☐											



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO31970

Purchase Order Date 4/7/2016

PO Print Date 4/7/2016

Page Number 1 of 12

Order From :

MCMaster-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

VU-MCM001

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
APR 07 2016

Contact Name

Vendor Phone

330 995 5500

Buyer

Customer POID

Customer Tax #

Terms

Currency

FOB

Chantal Lavoie

10127-2607

Net 10

USD

FCA - (Free Carrier)

Ship To Contact

Ship To Phone

Ship Via:

Purolator ground ppd

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	91525A120	washer	4/11/2016 Yes 4/11/2016		50.00 Each	\$0.27	\$13.32
AS PER DWG D3546 REV. A B144158							
Line Total:							\$13.32
2	92311A564	Set Screw	4/11/2016 Yes 4/11/2016		50.00 Each	\$0.23	\$11.65
AS PER DWG D3533 REV. B B144159							
Line Total:							\$11.65
3	6605K56	HOOK AND LOOP TIE	4/11/2016 Yes 4/11/2016		20.00 Each	\$2.78	\$55.56
AS PER DWG D3551 REV. A B144154							

Note:

4/7/2016

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO31970

Order Placed By
Chantal Lavoie

McMaster-Carr Number
1655544-02

Line	Product	Ordered	Shipped
1	91525A120 Type 316 Stainless Steel Flat Washer, Oversized, 1/4" Screw Size, 0.281" ID, 1.000" OD, Packs of 25	2 Packs	2
2	92311A564 18-8 Stainless Steel Cup Point Set Screw, 1/4"-28 Thread, 1" Long, Packs of 50	1 Pack	1
3	6605K56 Hook and Loop Cable Ties, 24" Overall LG., Meets UL 94V2, Packs of 5	4 Packs	4
4	6718K52 Stainless Steel Industrial-Shape Hose Coupling, Plug, 1/4" NPTF Female, 1/4 Coupling Size	6 Each	6
5	28765A844 Heat-Resist Cobalt Steel Short-Length Drill Bit, Size D, 2-1/2" L Overall, 1" Drill Depth, 135 Degree	5 Each	5
6	4457K215 Standard Wall Black Welded Steel Pipe, 3/4 Pipe Size X 14" Length, Threaded Ends	1 Each	1
7	6381K548 Multipurpose Sleeve Bearing, SAE 660 Tin Bronze, for 3/4" Shaft Diameter, 7/8" OD, 3/4" LG.	4 Each	4
8	5154T11 Steel Shaft Seal, Spring-Loaded Single Lip, 1/2" ID, 7/8" OD	1 Each	1
9	5154T12 Steel Shaft Seal, Spring-Loaded Single Lip, 5/8" ID, 1" OD	1 Each	1
10	98830A350 Steel Oversized Key Stock, 1/2" X 1/2", 12" Length	1 Each	1
11	4464K353 Type 304 Stainless Steel Threaded Pipe Fitting, 3/8 Pipe Size, Coupling, 150 PSI	2 Each	2
12	4882K912 Thick-Wall Dark Gray PVC Threaded Pipe Nipple, 3/8 Pipe Size X 12" Length, Threaded Ends, Schedule 80	2 Each	2
13	7343K184 Toggle Switch, SPST, Off-On, 6 Amps, Screw Terminal	2 Each	2
14	71695K27 Blank Cover without Knockout, Steel, for Switch Box	1 Each	1
15	7963K21 Snap-in Cord Grip for Building Cable, 1/2 Trade Size	10 Each	10
16	1039A14 Weather- and Cut-Rst Keyed Alike Padlock, with Solid Stainless Steel Body, Master Lock 187	1 Each	1
17	1039A24 Key #3475 for Master Lock 187 Solid Stainless Steel Body, Weather- and Cut-Rst Keyed Alike Padlock	1 Each	1
18	4281A24 Heavy Cleaning Brush with Threaded Arbor Mount, LG Lasting, 6" Diameter, 5/8" Thickness, 0.023" Bristle Diameter, Stainless Steel	1 Each	1
19	98355A085 Type 316 Stainless Steel Cotter Pin, 3/32" Diameter, 1-1/4" Length, Packs of 50	1 Pack	1

McMaster-Carr Supply Company
200 Aurora Industrial Pkwy
Aurora, OH 44202-8087 USA
Phone: 330-995-5500 Fax: 330-995-9600
E-Mail: cle.sales@mcmaster.com
Employer Identification Number (EIN): 36-1458720

Invoice: 54173820
Purchase Order: PO31970
Release:
McMaster-Carr Number: 1655544-02

ORIGINAL COMMERCIAL
INVOICE
CERTIFICATE OF ORIGIN

Ultimate Destination:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Shipped: 07-Apr-2016 FOB: ORIGIN

Shipper's Export Declaration (SED):
NO EEI 30.36

Intermediate Consignee:

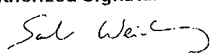
Bill To:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Tax Number:

Forwarding Agent:

Billing
Attention:
Shipping
Attention:
Contact:

Line	Description	Qty & Unit	Unit Price	Extension
1	91525A120 Type 316 Stainless Steel Flat Washer, Oversized, 1/4" Screw Size, 0.281" ID, 1.000" OD, Packs of 25 Country of Origin: Taiwan Schedule B #: 731822 ECCN #: EAR99 NLR	2 PK	\$6.66	\$13.32
2	92311A564 18-8 Stainless Steel Cup Point Set Screw, 1/4"-28 Thread, 1" Long, Packs of 50 Country of Origin: Taiwan Schedule B #: 731815 ECCN #: EAR99 NLR	1 PK	\$11.65	\$11.65
3	6605K56 Hook and Loop Cable Ties, 24" Overall LG., Meets UL 94V2, Packs of 5 Country of Origin: United States Schedule B #: 392690 ECCN #: EAR99 NLR	4 PK	\$13.89	\$55.56
4	6718K52 Stainless Steel Industrial-Shape Hose Coupling, Plug, 1/4" NPTF Female, 1/4 Coupling Size Country of Origin: United States Schedule B #: 848190 ECCN #: 2B999 NLR	6 EA	\$5.81	\$34.86
5	28765A844 Heat-Resist Cobalt Steel Short-Length Drill Bit, Size D, 2-1/2" L Overall, 1" Drill Depth, 135 Degree Country of Origin: United States Schedule B #: 820750 ECCN #: EAR99 NLR	5 EA	\$4.42	\$22.10
Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department. These commodities, technology, or software were exported from the United States in accordance with Export Administration regulations. Diversion contrary to US law is prohibited.				

Shipping Weight (in kgs): 10	Number of Packages: 1	Invoice Amounts:	Merchandise Amount: \$758.22
Package Dimensions: 44 X 44 X 22 CM = .043 CUBIC M			Canadian GST/HST: \$100.67
			Shipping Charges: \$16.33
			Total (In USD): \$875.22
Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days			
Authorized Signature: 		Remit payment to: (by wire transfer) Bank of America 222 Broadway New York, NY 10038 Account 86666-02021 SWIFT BOFAUS3N	
Date: 07-Apr-2016		(by mail) McMaster-Carr Supply Company PO Box 7690 Chicago, IL 60680-7690 USA	
Name: Sarah Weinberg	Title: Operations Mgr.	Page 1 of 4	